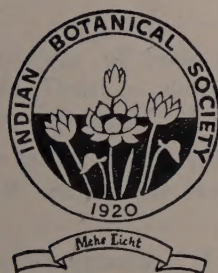


The Journal

of

The Indian Botanical Society

VOL. XXXVII—1958



EDITORIAL BOARD

T. S. Sadasivan, *Editor-in-Chief*

Director, Botany Laboratory, University of Madras

P. Maheshwari
Delhi University

M. Sayeed-ud-Din
Osmania University

B. P. Pal
New Delhi

B. Samantarai
Utkal University

A. C. Joshi
Chandigarh

A. Abraham
University of Kerala

H. Santapau
Bombay

R. Misra
Banaras Hindu University

J. Venkateswarlu
Andhra University

Published by the Indian Botanical Society

CONTENTS

Volume 37, 1958

No. 1

	PAGE
Some Aspects of Indian Hepaticology.....Pandé, S. K.	1
Fossil Diatoms from Colebrook Island.....	
.....Desikachary, T. V. and Maheshwari, C. L.	27
A New Species of <i>Discosiella</i> from Assam.....Agnihotrudu, V.	42
Hyphomycetes—V.....Subramanian, C. V.	47
Morphology and Physiology of Four Strains of Yeasts from Human Faeces and Their <i>in vitro</i> Sensitivity to NystatinSrivastava, O. P., Gupta, B. M. and Mukherji, B.	65
Culture Studies in the Genus <i>Riccia</i> (Mich.) L. III. Sporeling Germination in <i>R. trichocarpa</i> Howe—A ReinvestigationRam Udar	70
Studies in Indian Anthocerataceæ. II. The Morphology of Anthoceras <i>cf.</i> <i>gemmaulosus</i> (Hattori) Pandé.....	
.....Bharadwaj, D. C.	75
Studies in the Cytology and Phylogeny of the Pteridophytes. V. Observations on the Isætaeæ.....Ninan, C. A.	93
Studies on the Vessel Variations in Dicotyledonous Trees...Sebastine, K. M.	104
Embryology of <i>Rhus mysorensis</i> Heyne.....Kelkar, S. S.	114
Study of Velamen in some Epiphytic and Terrestrial Orchids Mulay, B. N., Deshpande, B. D. and Miss Williams, H. B.	123
<i>Palmoxydon puratanum</i> , a new species of Petrified Palms from the Tertiary Rocks of South Arcot District, Madras.....	
.....Ramanujam, C. G. K.	128
Notes on Indian Red Algæ—I.....Balakrishnan, M. S.	138
Floral Anatomy and Embryology of <i>Cipadessa bassifera</i> Miq.Narayana, L. L.	147
Studies on Piperaceæ.....Mathew, P. M.	155
Vascular Anatomy of the Flower of Some Species of Zygo- phyllaceæ.....Nair, N. C. and Kan Singh Nathawat	172

	PAGE
Morphology and Vascular Anatomy of the Spike of <i>Mnesithea laevis</i> (Retz.) Kunth.....	Nares Chandra 181
Effect of Transplantation on Ragi Plant.....	Appala Naidu, B. and Sankara Rao, K. S. R. K. 194
Review	200
Announcement	202

No. 2

Three New Species of <i>Temnogametum</i> from South India.....	Iyengar, M. O. P. 203
Spore Content of Air over the Mediterranean Sea.....	Sreeramulu, T. 220
On the Grasses of Parasnath (Bihar).....	Bharadwaja, R. C. 229
Carbon-Nitrogen Metabolism of Soil Fungi. VI. Amino Acid Composition of <i>Fusarium vasinfectum</i>	Natarajan, S. 233
Studies in the Family Vitaceæ. III. Floral Morphology of <i>Vitis latifolia</i> Roxb., <i>Vitis himalayana</i> Brandis and <i>Vitis trifolia</i> Linn.....	Kashyap, G. Miss 240
The Fresh-Water Diatom Flora of the Hirebhasgar Dam Area, Mysore State.....	Gandhi, H. P. 249
Studies in Lauraceæ. II. Embryology of <i>Cinnamomum</i> and <i>Litsea</i>	Sastri, R. L. N. 266
On the Differentiation of A and B Chromosomes of <i>Sorghum purpureo-sericeum</i> at Pachytene.....	Ramakrishna Reddy, V. 279
Male and Female Gametophytes in Four Species of <i>Asparagus</i>	Venkateswarlu, J. and Raju, C. S. K. 290
Studies in Indian Sauteriaceæ. I. Sporeling Patterns in <i>Athalamia pinguis</i> Falc.....	Ram Udar 300
A Preliminary Survey of Sand-Dune Vegetation of Pilani and Its Neighbourhood.....	Joshi, M. C. 309

No. 3

Cytological Observations on Spontaneously Occurring Ring and Chain Formation in <i>Coix aquatica</i>	Venkateswarlu, J. 329
Fungi of the Rhizosphere of Sugarcane and Allied Plants. I. <i>Hyalostachy botrys</i> gen. nov.....	Srinivasan, K. V. 334

	PAGE
Studies on the Effects of 2, 4-D and MCPA on Ragi Crop (<i>Eleusine coracana</i> Gaertn.) and Weeds.....	
.....Appala Naidu, B. and Chandra Singh, D. J.	343
Regeneration in Polytrichaceæ.....	
.....Chopra, R. S. and Sharma, P. D.	353
The Embryology of <i>Oldenlandia corymbosa</i> Linn.....	Farooq, M. 358
Floral Anatomy of Meliaceæ. I.....	Narayana, L. L. 365
An Addition to the Literature on Sulphur and Phosphorus Requirements of Fungi.....	Agarwal, G. P. 375
A Note on Two New Species of <i>Spirogyra</i> and <i>Sirogonium</i>	
.....Randhawa, M. S.	380
A New Species of <i>Sphærelloopsis</i>	Balakrishnan, M. S. 382
A New Type of Lateral Conjugation in <i>Spirogyra</i>	
.....Iyengar, M. O. P.	387
Anatomy of <i>Solanum melongena</i> Seedlings Hardened under Different Moisture Stresses.....	
.....D'Cruz, R., Pandey, S. G. and Chaugule, B. A.	394
Hyphomycetes—VI. Two New Genera <i>Edmundmasonia</i> and <i>Iyengarina</i>	Subramanian, C. V. 401
Seeds of <i>Viracarpon hexaspermum</i> Sahni from the Intertrappean Beds of Mohgaon Kalan, India.....	Chitale, S. D. 408
Carbon-Nitrogen Metabolism of Soil Fungi. VII. Transaminase Activity in <i>Fusarium vasinfectum</i>	Natarajan, S. 412
The Genus <i>Riccardia</i> Gray in India. I. <i>Riccardia levieri</i> Schffn.	Pandé, S. K. and Srivastava, K. P. 417
Fungi Isolated from Rhizosphere. IV.....	Agnihothrudu, V. 422
Review	432
Announcement	433

No. 4

Phytoplankton Organisms of the Arabian Sea off the West Coast of India.....	Subrahmanyam, R. 435
A Contribution to the Life-History of <i>Rubia cordifolia</i> Linn.	Venkateswarlu, J. and Rajeswara Rao, G. 442
The Clavariaceæ of the Mussoorie Hills—X.....	
.....Thind, K. S. and Raswan, G. S.	455

Carbon-Nitrogen Metabolism of Soil-Fungi. VIII. Mechanism of Nitrate Utilization in <i>Fusarium vasinfectum</i>	Natarajan, S.	470
Studies in the Order Piperales. II. A Contribution to the Study of Vascular Anatomy of the Flower of <i>Peperomia</i>	Murty, Y. S.	474
A Fossil Dicotyledonous Wood from the Deccan Intertrappean Beds of Mahurzari.....	Shallom, L. J.	492
Notes on Fungi from North-East India. II. An Undescribed Myxomycete from Assam.....	Agnihothrudu, V.	499
The Female Gametophyte of <i>Acalypha malabarica</i> Muell. with a Brief Discussion on the Penæa Type of Embryo-Sac.....	Mukherjee, P. K.	504
Essentiality of Trace Elements to Some Soil Fungi.....	Saraswathi-Devi, L. (Miss)	509
Floral Anatomy of Simarubaceæ—I.....	Narayana, L. L. and Sayeeduddin, M.	517